[54] **PROCESS OF ENCAPSULATING AN OIL AND PRODUCT PRODUCED THEREBY**

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[58] **Field of Search**........................... 252/316, 522; 117/100 A; 424/35; 426/89, 96, 650, 103

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[57]   **ABSTRACT**

Compositions, preferably in particulate form, comprising a cellular matrix having oil in the cells thereof in which the matrix comprises polysaccharide and polyhydroxy compounds in such proportions that the oil may constitute up to 80% by volume so stably held in the cells that the extractable oil is not substantially in excess of 5%. This is accomplished by proportioning the ingredients to produce a glassy, preferably water soluble, matrix having a plastic or flowable range that prevents or seals oil escape paths in the wall material such as cracks, fissures, pin holes and deep pits. The polysaccharides are primarily not the sweet, readily soluble saccharides like sugar but rather higher polysaccharides of the non-sweet, colloidally soluble types such as natural gums, e.g., gum arabic, starch derivatives, dextrinized and hydrolyzed starches, and the like. The polyhydroxy compounds may be alcohols, plant-type sugars, lactones, monoethers and acetals. The process of making these compositions comprises forming an aqueous phase of the polysaccharide and polyhydroxy compound in proper proportions, with added emulsifier if necessary or desirable, emulsifying the oil (either of the volatile or non-volatile type) in the aqueous phase and removing moisture while the mass is plastic or flowable, e.g., by spray drying droplets of the emulsion, by spreading on a substrate such as a belt, drum, drinking cup and the like.

12 Claims, 13 Drawing Figures